

## SEQUENCE LISTING

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RAMOSHEBI, LENTSHA N.

<120> METHODS FOR INDUCING ANGIOGENESIS USING MORPHOGENIC  
PROTEINS AND STIMULATORY FACTORS

<130> STK-6

<140>

<141>

<160> 10

<170> PatentIn Ver. 2.1

<210> 1

<211> 1822

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (49)...(1341)

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Arg Ser Leu Arg Ala Ala Ala Pro His Ser Phe Val Ala Leu Trp Ala  
5 10 15

ccc ctg ttc ctg ctg cgc tcc gcc ctg gcc gac ttc agc ctg gac aac 153  
Pro Leu Phe Leu Leu Arg Ser Ala Leu Ala Asp Phe Ser Leu Asp Asn  
20 25 30 35

gag gtg cac tcg agc ttc atc cac cgg cgc ctc cgc agc cag gag cgg 201  
Glu Val His Ser Ser Phe Ile His Arg Arg Leu Arg Ser Gln Glu Arg  
40 45 50

cgg gag atg cag cgc gag atc ctc tcc att ttg ggc ttg ccc cac cgc 249  
Arg Glu Met Gln Arg Glu Ile Leu Ser Ile Leu Gly Leu Pro His Arg  
55 60 65

ccg cgc ccg cac ctc cag ggc aag cac aac tcg gca ccc atg ttc atg 297  
Pro Arg Pro His Leu Gln Gly Lys His Asn Ser Ala Pro Met Phe Met  
70 75 80

ctg gac ctg tac aac gcc atg gcg gtg gag gag ggc ggc ggg ccc ggc 345  
Leu Asp Leu Tyr Asn Ala Met Ala Val Glu Glu Gly Gly Gly Pro Gly  
85 90 95

ggc cag ggc ttc tcc tac ccc tac aag gcc gtc ttc agt acc cag ggc 393  
Gly Gln Gly Phe Ser Tyr Pro Tyr Lys Ala Val Phe Ser Thr Gln Gly  
100 105 110 115

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atg Met	gtc Val	atg Met	agc Ser 135	ttc Phe	gtc Val	aac Asn	ctc Leu	gtg Val 140	gaa Glu	cat His	gac Asp	aag Lys	gaa Glu 145	ttc Phe	ttc Phe	489
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cca Pro	gaa Glu 165	ggg Gly	gaa Glu	gct Ala	gtc Val	acg Thr 170	gca Ala	gcc Ala	gaa Glu	ttc Phe	cgg Arg 175	atc Ile	tac Tyr	aag Lys	gac Asp	585
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gcc tac tac tgt gag ggg gag tgt gcc ttc cct ctg aac tcc tac atg 1161  
 Ala Tyr Tyr Cys Glu Gly Glu Cys Ala Phe Pro Leu Asn Ser Tyr Met  
 360 365 370

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<210> 2

<211> 431

<212> PRT

<213> Homo sapiens

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 1 5 10 15

Leu Trp Ala Pro Leu Phe Leu Leu Arg Ser Ala Leu Ala Asp Phe Ser  
 20 25 30

Leu Asp Asn Glu Val His Ser Ser Phe Ile His Arg Arg Leu Arg Ser  
 35 40 45

Gln Glu Arg Arg Glu Met Gln Arg Glu Ile Leu Ser Ile Leu Gly Leu  
 50 55 60

005404560 033100

Pro 65	His	Arg	Pro	Arg	Pro 70	His	Leu	Gln	Gly	Lys 75	His	Asn	Ser	Ala	Pro 80
Met	Phe	Met	Leu	Asp 85	Leu	Tyr	Asn	Ala	Met 90	Ala	Val	Glu	Glu	Gly 95	Gly
Gly	Pro	Gly	Gly 100	Gln	Gly	Phe	Ser	Tyr 105	Pro	Tyr	Lys	Ala	Val 110	Phe	Ser
Thr	Gln	Gly 115	Pro	Pro	Leu	Ala	Ser 120	Leu	Gln	Asp	Ser	His 125	Phe	Leu	Thr
Asp	Ala 130	Asp	Met	Val	Met	Ser 135	Phe	Val	Asn	Leu	Val 140	Glu	His	Asp	Lys
Glu 145	Phe	Phe	His	Pro	Arg 150	Tyr	His	His	Arg	Glu 155	Phe	Arg	Phe	Asp	Leu 160
Ser	Lys	Ile	Pro	Glu 165	Gly	Glu	Ala	Val	Thr 170	Ala	Ala	Glu	Phe	Arg 175	Ile
Tyr	Lys	Asp 180	Tyr	Ile	Arg	Glu	Arg 185	Phe	Asp	Asn	Glu	Thr 190	Phe	Arg	Ile
Ser	Val	Tyr 195	Gln	Val	Leu	Gln	Glu 200	His	Leu	Gly	Arg 205	Glu	Ser	Asp	Leu
Phe 210	Leu	Leu	Asp	Ser	Arg	Thr 215	Leu	Trp	Ala	Ser	Glu 220	Glu	Gly	Trp	Leu
Val 225	Phe	Asp	Ile	Thr	Ala 230	Thr	Ser	Asn	His	Trp 235	Val	Val	Asn	Pro	Arg 240
His	Asn	Leu	Gly 245	Leu	Gln	Leu	Ser	Val	Glu 250	Thr	Leu	Asp	Gly	Gln 255	Ser
Ile	Asn	Pro 260	Lys	Leu	Ala	Gly	Leu 265	Ile	Gly	Arg	His	Gly 270	Pro	Gln	Asn
Lys	Gln	Pro 275	Phe	Met	Val	Ala	Phe 280	Phe	Lys	Ala	Thr	Glu 285	Val	His	Phe
Arg	Ser 290	Ile	Arg	Ser	Thr	Gly 295	Ser	Lys	Gln	Arg	Ser 300	Gln	Asn	Arg	Ser
Lys 305	Thr	Pro	Lys	Asn 310	Gln	Glu	Ala	Leu	Arg	Met 315	Ala	Asn	Val	Ala	Glu 320
Asn	Ser	Ser	Ser	Asp 325	Gln	Arg	Gln	Ala	Cys 330	Lys	Lys	His	Glu	Leu 335	Tyr
Val	Ser	Phe	Arg 340	Asp	Leu	Gly	Trp	Gln 345	Asp	Trp	Ile	Ile	Ala 350	Pro	Glu
Gly	Tyr	Ala 355	Ala	Tyr	Tyr	Cys 360	Glu	Gly	Glu	Cys	Ala 365	Phe	Pro	Leu	Asn

Ser Tyr Met Asn Ala Thr Asn His Ala Ile Val Gln Thr Leu Val His  
370 375 380

Phe Ile Asn Pro Glu Thr Val Pro Lys Pro Cys Cys Ala Pro Thr Gln  
385 390 395 400

Leu Asn Ala Ile Ser Val Leu Tyr Phe Asp Asp Ser Ser Asn Val Ile  
405 410 415

Leu Lys Lys Tyr Arg Asn Met Val Val Arg Ala Cys Gly Cys His  
420 425 430

<210> 3

<211> 102

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: OPX

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<223> each Xaa is independently selected from a group of  
one or more specified amino acids as defined in  
the specification

<400> 3

Cys Xaa Xaa His Glu Leu Tyr Val Ser Phe Xaa Asp Leu Gly Trp Xaa  
1 5 10 15

Asp Trp Xaa Ile Ala Pro Xaa Gly Tyr Xaa Ala Tyr Tyr Cys Glu Gly  
20 25 30

Glu Cys Xaa Phe Pro Leu Xaa Ser Xaa Met Asn Ala Thr Asn His Ala  
35 40 45

Ile Xaa Gln Xaa Leu Val His Xaa Xaa Xaa Pro Xaa Xaa Val Pro Lys  
50 55 60

Xaa Cys Cys Ala Pro Thr Xaa Leu Xaa Ala Xaa Ser Val Leu Tyr Xaa  
65 70 75 80

Asp Xaa Ser Xaa Asn Val Ile Leu Xaa Lys Xaa Arg Asn Met Val Val  
85 90 95

Xaa Ala Cys Gly Cys His  
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<210> 4

<211> 97

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Generic-Seq-7

<220>

00540456 033100

CR4  
Ag

<223> each Xaa is independently selected from a group of one or more specified amino acids as defined in the specification

<400> 4

Leu Xaa Xaa Xaa Phe Xaa Xaa Xaa Gly Trp Xaa Xaa Xaa Xaa Xaa Xaa  
1 5 10 15

Pro Xaa Xaa Xaa Xaa Ala Xaa Tyr Cys Xaa Gly Xaa Cys Xaa Xaa Pro  
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asn His Ala Xaa Xaa Xaa Xaa Xaa  
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Cys Xaa Pro  
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
65 70 75 80

Val Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Met Xaa Val Xaa Xaa Cys Xaa Cys  
85 90 95

Xaa

<210> 5

<211> 102

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Generic-Seq-8

<220>

<223> each Xaa is independently selected from a group of one or more specified amino acids as defined in the specification

<400> 5

Cys Xaa Xaa Xaa Xaa Leu Xaa Xaa Xaa Phe Xaa Xaa Xaa Gly Trp Xaa  
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Pro Xaa Xaa Xaa Xaa Ala Xaa Tyr Cys Xaa Gly  
20 25 30

Xaa Cys Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asn His Ala  
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
50 55 60

Xaa Cys Cys Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa  
65 70 75 80

Xaa Xaa Xaa Xaa Xaa Val Xaa Leu Xaa Xaa Xaa Xaa Xaa Met Xaa Val  
85 90 95

0054066 033100

Xaa Xaa Cys Xaa Cys Xaa  
100

<210> 6  
<211> 97  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Generic-Seq-9

<220>  
<223> each Xaa is independently selected from a group of one or more specified amino acids as defined in the specification

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1 5 10 15

Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Gly Xaa Cys Xaa Xaa Xaa  
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Pro  
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
65 70 75 80

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Cys  
85 90 95

Xaa

<210> 7  
<211> 102  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Generic-Seq-10

<220>  
<223> each Xaa is independently selected from a group of one or more specified amino acids as defined in the specification

<400> 7  
Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
1 5 10 15

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<210> 8
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Generic Sequence

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<223> each Xaa is independently selected from a group of
      one or more specified amino acids as defined in
      the specification

<400> 8
Cys Xaa Xaa Xaa Xaa
  1                               5

<210> 9
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Generic Sequence

<220>
<223> each Xaa is independently selected from a group of
      one or more specified amino acids as defined in
      the specification

<400> 9
Cys Xaa Xaa Xaa Xaa
  1                               5

<210> 10
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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Generic Sequence

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<223> each Xaa represents any amino acid residue

<400> 10

Cys Xaa Xaa Xaa Xaa Leu Xaa Val Xaa Phe Xaa Asp Xaa Glu Trp Xaa  
1 5 10 15

Xaa Trp Xaa Xaa Xaa Pro Xaa Gly Xaa Xaa Ala Xaa Tyr Cys Xaa Gly  
20 25 30

Xaa Cys Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asn His Ala  
35 40 45

Xaa Xaa Gln Xaa Xaa Val Xaa Xaa Xaa Asn Xaa Xaa Xaa Xaa Pro Xaa  
50 55 60

Xaa Cys Cys Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa  
65 70 75 80

Xaa Xaa Xaa Xaa Xaa Val Xaa Leu Xaa Xaa Tyr Xaa Xaa Met Xaa Val  
85 90 95

Xaa Xaa Cys Xaa Cys Xaa  
100

00750" 9940456 033400